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10/588,879	08/09/2006	George E. Hoffman	4003.PALM.PSI	4106
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EXAMINER				
LEE, CHUN KUAN				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,879

Applicant(s)

HOFFMAN ET AL.

Examiner

Chun-Kuan Lee

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-21 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) 32-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-21 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

RESPONSE TO ARGUMENTS

1. Applicant's arguments filed 11/24/2010 have been fully considered but they are not persuasive. Currently, claims 2-3 and 22-30 are cancelled; claims 32-40 are withdrawn; and claims 1, 4-21 and 31 are pending for examination.

2. In response to applicant's arguments with regard to the independent claims 1, 20-21 and 31 rejected under 35 U.S.C. 103(a) that the combination of the references does not teach/suggest the claimed invention because the combination of Colburn with Scheifler impermissibly changes the principle operation of Scheifler, as Scheifler stores security details (e.g., permissions) in a centralized policy file not in target objects, as permissions authorizing access are based on source and executor of a piece of particular code; furthermore, Colburn relies on an owner-identifier being incorporated into objects, wherein this identifier is based on the creator of an object or the system used to create the object, and Colburn defines a set of access authorizations that creators must implement into their objects (i.e. not based on a centralized authority controlling security details; instead, is based on the existence of an owner identifier and a standardized system of access authorizations); additionally, Scheifler's system and Colburn's system describe two different specific implementations of controlling access that is not compatible; applicant's arguments have fully been considered, but are not found to be persuasive.

The examiner respectfully disagrees, because of the following:

- the examiner is not fully clear where in Scheifler teach that the security detail is "centralized", as no where in Scheifler's disclosure utilizes the term "centralized"; therefore, the examiner is unable to properly respond to applicant's arguments associated with Scheifler's security detail being "centralized";

- the examiner is not fully clear where Colburn discloses "defines a set of access authorizations that creators must implement into their objects" (i.e. creators must implement a set of access authorizations into their objects); therefore, the examiner is unable to properly respond to applicant's arguments associated with Colburn disclosing creators must implement a set of access authorizations into their objects; and

- the Scheifler's system and Colburn's system are compatible because both utilizes object oriented programming (e.g. Java programming) associated with security measures; and furthermore, the two references are compatible as Scheifler's permissions authorizing access are based on source and executor of a piece of particular code (i.e. as presented in applicant's arguments) and Colburn's system for permissions authorizing access are also based on source (e.g. owner-identifier associated with source) and executor (e.g. target/executor 160 of Figure 8) of a piece of particular code; therefore, by modifying Scheifler's system with Colburn's security architecture, the resulting combination of the references does teach the claimed invention; lastly, the principle of operation for Scheifler's system did not change, as Scheifler's system still implements security measures associated with object oriented programming (e.g. Java programming).

3. In response to applicant's arguments with regard to the independent claims 1, 20-21 and 31 rejected under 35 U.S.C. 103(a) that the combination of the references does not teach/suggest the claimed feature associated with "the target object determines whether an external object access to a particular interface based on a call to the first interface" because Scheifler discloses implied permissions to other interfaces and not the current invention corresponding to each interface may be granted varying degrees of access to the target object or each of these interfaces grants a specific set of permissions to any object obtaining a references to it; additionally, adding Colburn to Scheifler does not solve the deficiencies, as Colburn's security permissions are not granted based on a call to a first interface and Colburn's security policy of a target object is certainly not contained solely within the target object (i.e. Colburn's security policy is granted base on a combination of owner identifier and access authorizations; and the access authorizations are not interface based but arbitrary designation that enable different level of access to the objects and the utilization of owner identifier necessarily involves a process outside of a particular object); applicant's arguments have fully been considered, but are not found to be persuasive.

The examiner respectfully disagrees, and please note that the features upon which applicant relies (i.e., each interface may be granted varying degrees of access to the target object or each of these interfaces grants a specific set of permissions to any object obtaining a references to it) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are

not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Please note that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Wherein, Scheifler discloses that security permissions are granted (e.g. granting permission to any specific file within a directory) based on a call to a first interface (e.g. call to access said directory, wherein permission to said directory is granted) and Colburn's security policy (Fig. 8, ref. 184, 194) of a target object (Fig. 8, ref. 160) is contained solely within the target object (Fig. 8, ref. 160, 184, 194), wherein the examiner equivocate the claimed "security policy" to Colburn's target access constraints (Fig. 8, ref. 184) and access authorizations (Fig. 8, ref. 194) which are contained solely within the target object (Fig. 8, ref. 160).

I. REJECTIONS BASED ON PRIOR ART

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-21 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheifler et al. (US Patent 6,138,238) in view of Colburn et al. (US Patent 6,173,404).

5. As per claims 1, 20-21 and 31, Scheifler teaches a method, a system and a computer readable storage medium storing instructions for controlling a computer device for controlling access to an object in an operating system, the method, system and computer readable storage medium comprising:

a module configured means for receiving a call from an external thread (Fig. 6, ref. 6200) to a first interface (e.g. write to any file in a directory, such as "c:/") of a target object (Fig. 6, ref. 4500-1) (Fig. 1; Fig. 4-5; col. 4, l. 51 to col. 5, l. 3 and col. 9, l. 11 to col. 14, l. 38);

a module configured with means for determining whether the external thread has access to other interfaces (e.g. write to any specific file in the directory, such as "c:/thisfile") of the target object based on the call received at the first interface (Fig. 4-5 and col. 11, l. 20 to col. 13, l. 45), wherein the determination is in association with implied permission;

wherein the means for determining is solely determined by (based on) the first interface (Fig. 4-5 and col. 11, l. 20 to col. 13, l. 45), as the determination for access to any specific file in a directory (e.g. c:/thisfile) is implied (e.g. solely determined) by the determined accessing to said directory (e.g. c:/); and

a module configured with means for to grant access to the other interfaces according to the determination (Fig. 4-5 and col. 11, l. 20 to col. 13, l. 45).

Scheifler does not expressly teach the method, system and computer readable medium comprising: wherein the call from an object; the target object determining access to the other interfaces; and wherein the determination step comprising means for examining a security policy contained entirely within the target object.

Colburn teaches the method, system and computer readable medium comprising: a call received from an object (Fig. 5, ref. 100); a target object (Fig. 8, ref. 160, 184, 194) determining (at the target object) access to the other interfaces; and wherein the determination step comprising means for examining a security policy (Fig. 8, ref. 184, 194) contained entirely within the target object (Fig. 8, ref. 160) (Fig. 7A-7B; Fig. 8; col. 1, l. 12 to col. 3, l. 45; col. 7, ll. 26-52 and col. 11, l. 25 to col. 12, l. 58), by combination Colburn's target security scheme with Scheifler's permission implementation, the resulting combination further teaches the target object implementing access authorization in association with implied permission to other interfaces, as the target object determines the access authorization of the received call to the other interfaces by examining the target object's own security policies.

It would have been obvious for one of ordinary skill in this art, at the time of invention was made to include Colburn's inter-object security scheme into Scheifler's object for the benefit of implementing a more robust security scheme between objects (Colburn, col. 3, ll. 34-37) to obtain the invention as specified in claims 1, 20-21 and 31.

6. As per claim 4, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein Scheifler further teaches the method further comprising determining whether the external object and the target object operate in a same process (e.g. same class of valid digital signature or not) (Scheifler, col. 9, l. 52 to col. 11, l. 19).

7. As per claim 5, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein Scheifler further teaches the method comprising wherein determining whether the external object has access to the other interfaces of the target object further comprises: identifying the other interfaces of the target object that can be accessed when the first interface is being requested by the external object (Scheifler, col. 11, l. 20 to col. 13, l. 45), as the other interfaces must be identified in order to proper grant the permission via the implied permission.

8. As per claim 6, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein both further teach the method further comprising determining a first process of the target object (Scheifler, col. 9, l. 52 to col. 11, l. 19 and Colburn, Fig. 8; Fig. 10; col. 1, l. 12 to col. 3, l. 45), such as determining whether the target object's first process corresponds to either valid digital signature with known keys or digital signature that cannot be verified thus a default key is utilized.

9. As per claim 7, Scheifler and Colburn teach all the limitation of claim 6 as discussed above, wherein both further teach the method further comprising determining

a second process of the external object (Scheifler, col. 9, l. 52 to col. 11, l. 19 and Colburn, Fig. 8; Fig. 10; col. 1, l. 12 to col. 3, l. 45), such as determining whether the external object's second process corresponds to either valid digital signature with known keys or digital signature that cannot be verified thus a default key is utilized.

10. As per claim 8, Scheifler and Colburn teach all the limitation of claim 7 as discussed above, wherein both further teach the method further comprising performing a cross-process communication between the target object and the external object (Scheifler, col. 9, l. 52 to col. 11, l. 19 and Colburn, Fig. 8; Fig. 10; col. 1, l. 12 to col. 3, l. 45; col. 13, l. 44 to col. 14, l. 34), such as allowing restrictive access to the target object as the target object is under valid digital signature process and the external object is not under valid digital signature process.

11. As per claim 9, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein both further teach the method further comprising securing a channel for each interface of the target object (Scheifler, col. 9, l. 52 to col. 11, l. 19 and Colburn, Fig. 8; Fig. 10; col. 1, l. 12 to col. 3, l. 45; col. 13, l. 44 to col. 14, l. 34), as the channel is secured via a cryptographic key over a network between client and server.

12. As per claim 10, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein both further teach the method comprising wherein determining whether the external object has access to the other interfaces of the target

object further comprises analyzing access constraints within the target object (Scheifler, col. 11, l. 20 to col. 13, l. 45 and Colburn, Fig. 7A-7B; Fig. 8; col. 13, l. 44 to col. 14, l. 34), as the analyzing of the implied permission is located within the target object.

13. As per claim 11, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein both further teach the method further comprising analyzing interface access data stored within the target object (Scheifler, col. 11, l. 20 to col. 13, l. 45 and Colburn, Fig. 7A-7B; Fig. 8; col. 13, l. 44 to col. 14, l. 34).

14. As per claim 12, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein both further teach the method further comprising determining whether the target object and the external object are in a same protection domain (Scheifler, Fig 4; col. 11, l. 20 to col. 13, l. 45 and Colburn, Fig. 8).

15. As per claim 13, Scheifler and Colburn teach all the limitation of claim 12 as discussed above, wherein both further teach the method comprising wherein the protection domain is a process (Scheifler, Fig 4 and col. 9, l. 52 to col. 13, l. 45 and Colburn, Fig. 8), wherein the process is associated with valid digital signature and un-validated digital signature.

16. As per claim 14, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein Colburn further teaches the method comprising wherein the

target object sets the target object's own security policy (Colburn, Fig. 8), the target object sets the target object's own security policy as the access constraints and access authorization resides within the target object.

17. As per claim 15, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein Scheifler further teaches the method comprising wherein determining whether the external object has access to the other interfaces further comprises determining capabilities of the external object (Scheifler, col. 9, l. 52 to col. 13, l. 45), as the capability corresponds to the capability of transferring data along with the know key or without the know key.

18. As per claim 16, Scheifler and Colburn teach all the limitation of claim 15 as discussed above, wherein Colburn further teaches the method comprising further comprising mapping capabilities of the external object to the other interfaces of the target object (Scheifler, col. 9, l. 52 to col. 13, l. 45), such as mapping the capability of transferring data with the know key to other interfaces for grater access.

19. As per claim 17, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein both further teach the method comprising wherein the target object and the external object are created using a same methodology (e.g. object oriented by Java) (Scheifler, col. 9, l. 52 to col. col. 11, l. 19 and Colburn, col. 1, l. 12 to col. 3, l. 45).

20. As per claim 18, Scheifler and Colburn teach all the limitation of claim 1 as discussed above, wherein Colburn further teaches the method comprising wherein the target object and the external object are views in a view hierarchy (Colburn, col. 1, l. 12 to col. 3, l. 45).

21. As per claim 19, Scheifler and Colburn teach all the limitation of claim 18 as discussed above, wherein Colburn further teaches the method comprising wherein a view has a parent calling interface, a child calling interface, and a child managing interface (Colburn, col. 6, ll. 29-52), as the hierarchal relation between parent-child is well known with the corresponding above interfaces for the parent and the child.

II. CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

a(1) CLAIMS REJECTED IN THE APPLICATION

Per the instant office action, claims 1, 4-21 and 31 have received a first action on the merits and are subject of a first action non-final.

b. DIRECTION OF FUTURE CORRESPONDENCES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671. The examiner can normally be reached on 8AM to 5PM.

IMPORTANT NOTE

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chun-Kuan Lee/
Primary Examiner
Art Unit 2181
January 20, 2011